

# Public Informational Meeting

September 3, 2020

## Bridge Preservation NHDOT Project No. 41483

Gilford Bridge 102/099 – NH Route 11 over Gunstock River

Gilford Bridge 138/137 – NH Route 11A over Poor Farm Brook

# Meeting Participant Protocols:

- There will be an opportunity to ask questions and/or provide comments at the end of the formal presentation.
- Questions/comments can either be entered into the “Q&A box”, or can be addressed through the “raise your hand” option if you prefer to speak.
- When dialing in via phone, pressing \*9 will activate the “raise your hand” feature. State your name prior to asking your question.

# PRESENTERS

Joe Adams, DOT Project Manager – Introduces Project

Phil Brogan, DOT Project Lead – Bridge, Traffic & Environmental Issues

# PANELISTS

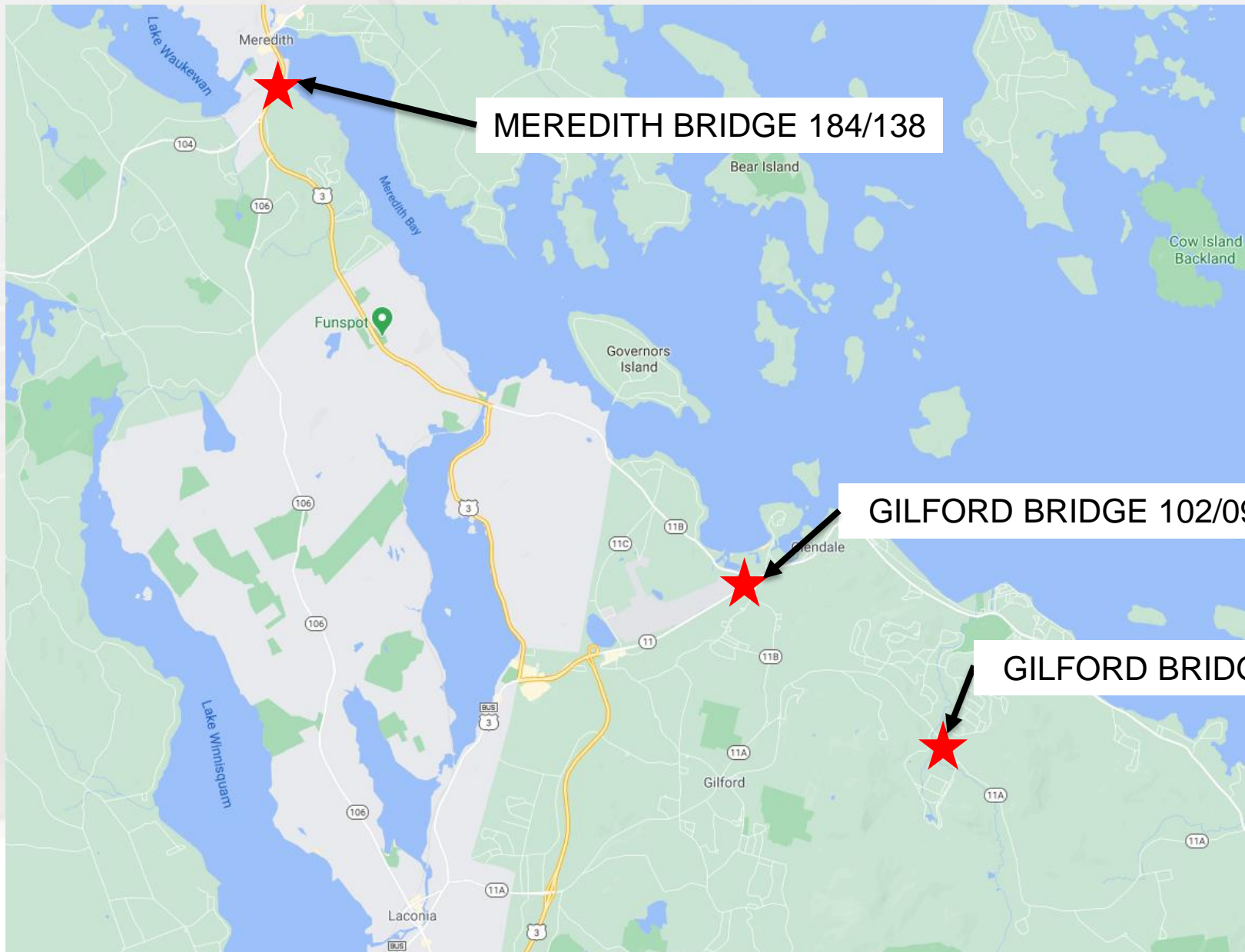
Mike Mozer, DOT Senior Project Engineer

Rebecca Martin, DOT Senior Environmental Manager

Sam White, McFarland Johnson Design Team

Steve Ireland, McFarland Johnson Design Team

# Project Location



# What is Bridge Preservation?

- Regular maintenance that extends the life of the bridge by addressing deterioration before it accelerates
- More cost effective than waiting until some or all of the bridge requires complete replacement
- Similar to regular oil changes in a vehicle



Gilford – Bridge 102/099 – NH Route 11 over Gunstock River

# Project Location



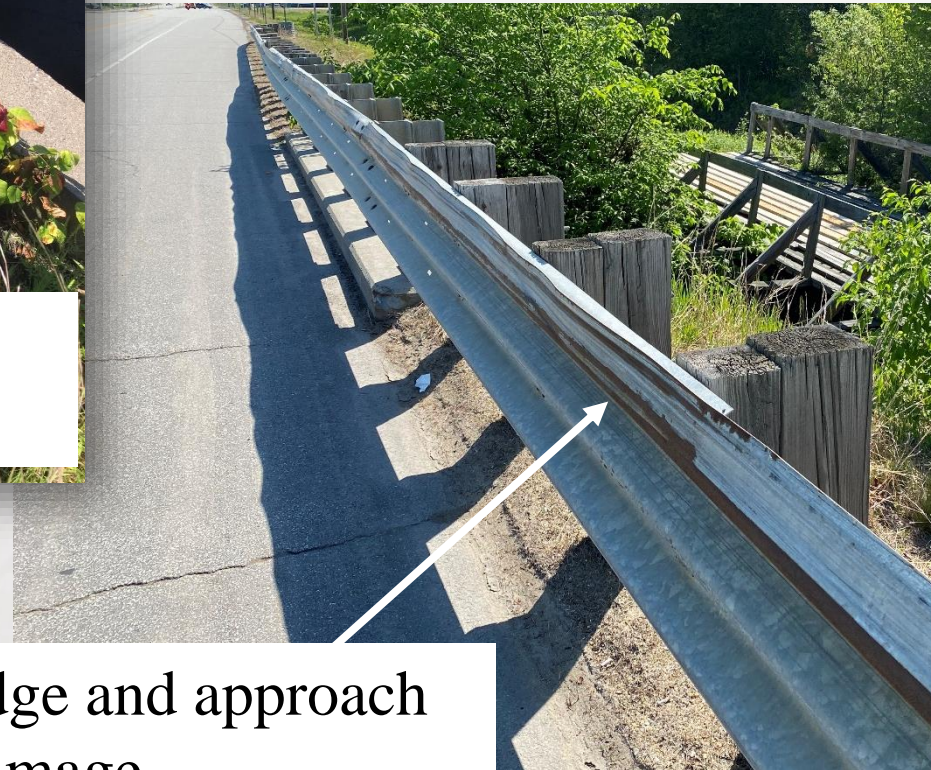
# Existing Bridge Details

- Concrete box structure
- Single 20'-0" span
- 44'-0" curb-to-curb width
- Constructed in 1958
  - Curbs and rails replaced in 1997
  - Center of concrete deck patched in 2000
- 10,000 vehicles per day, 7% trucks
- Existing snowmobile bridge to the south

# Existing Bridge Deterioration



Approach rail post  
severe section loss

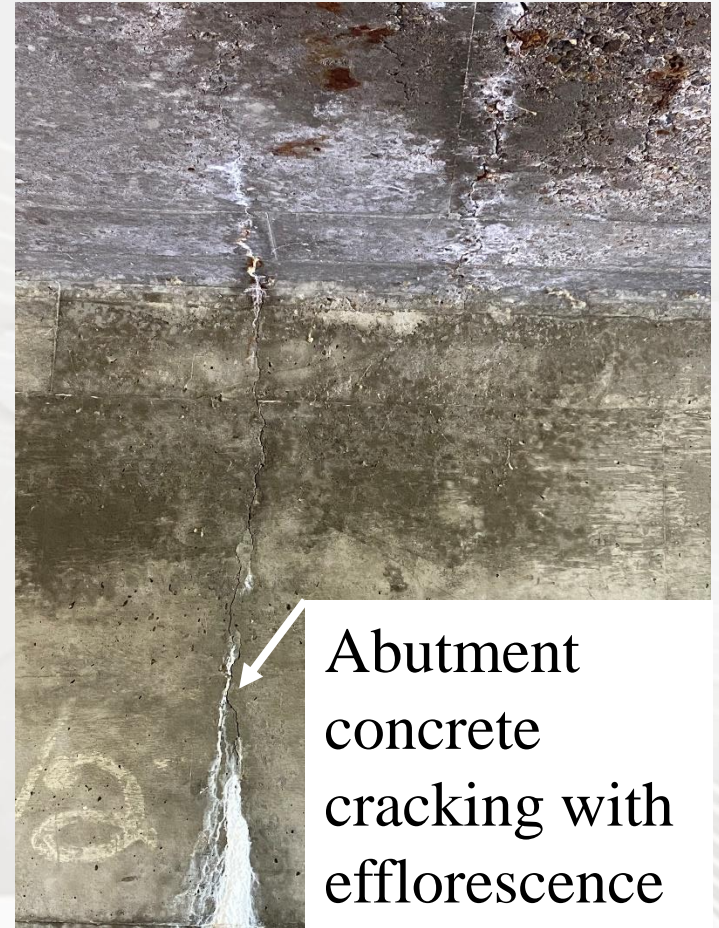


Typical bridge and approach  
rail plow damage

# Existing Bridge Deterioration



Concrete cracking and water infiltration at center of bridge deck



Abutment concrete cracking with efflorescence

# Bridge Preservation Items

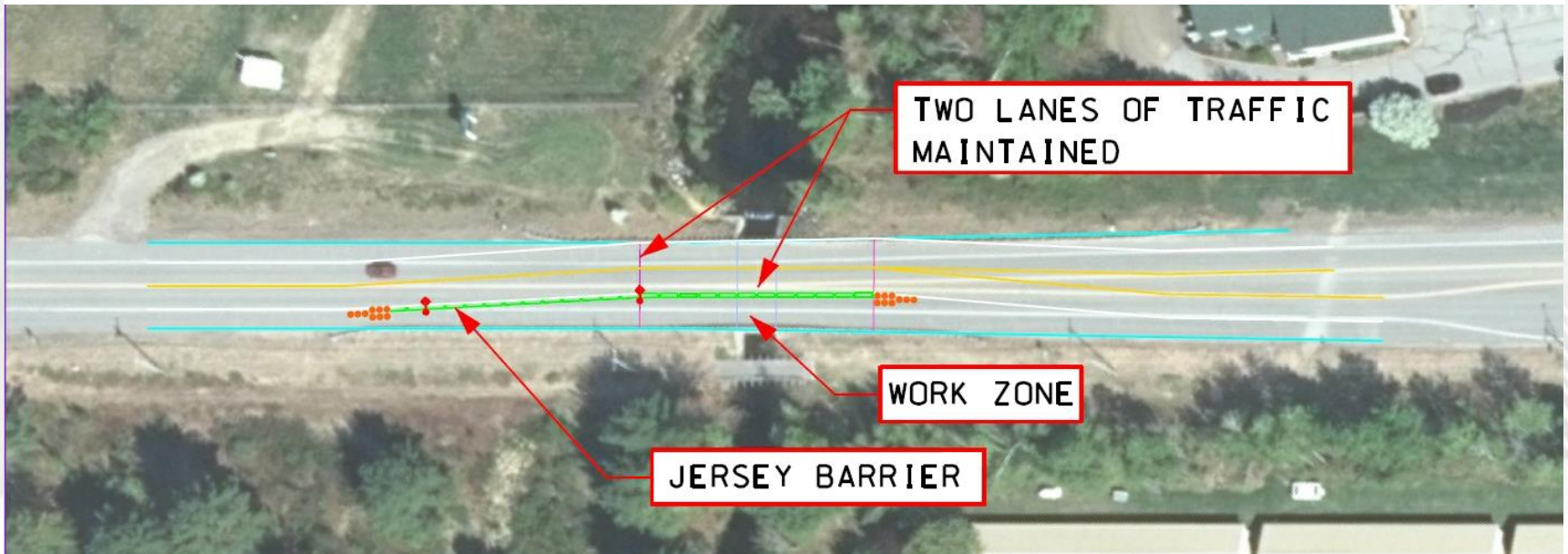
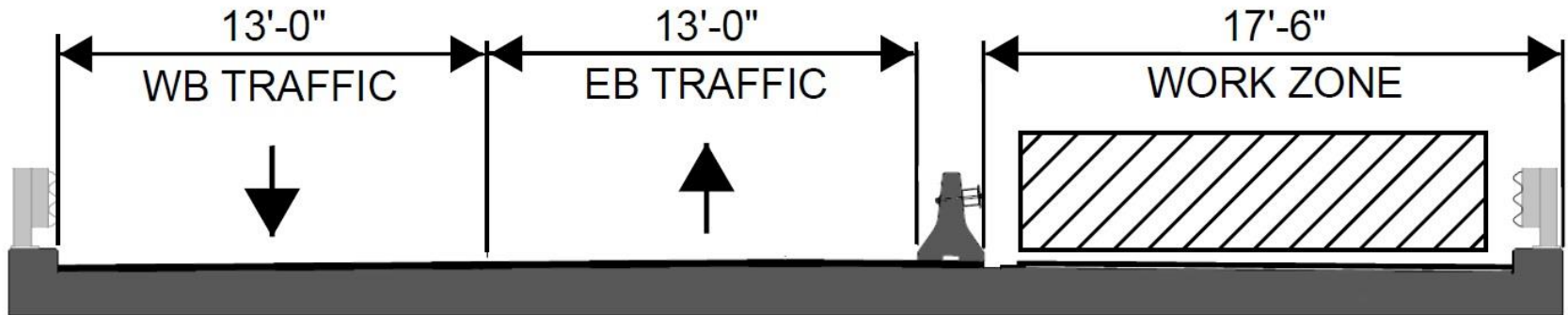
- Replace bridge deck membrane and asphalt overlay
- Complete concrete repair to deck and substructures
- Seal cracks in abutment walls
- Replace approach guardrail and terminal units
- Replace guardrail thrie beam on bridge

# Traffic Control

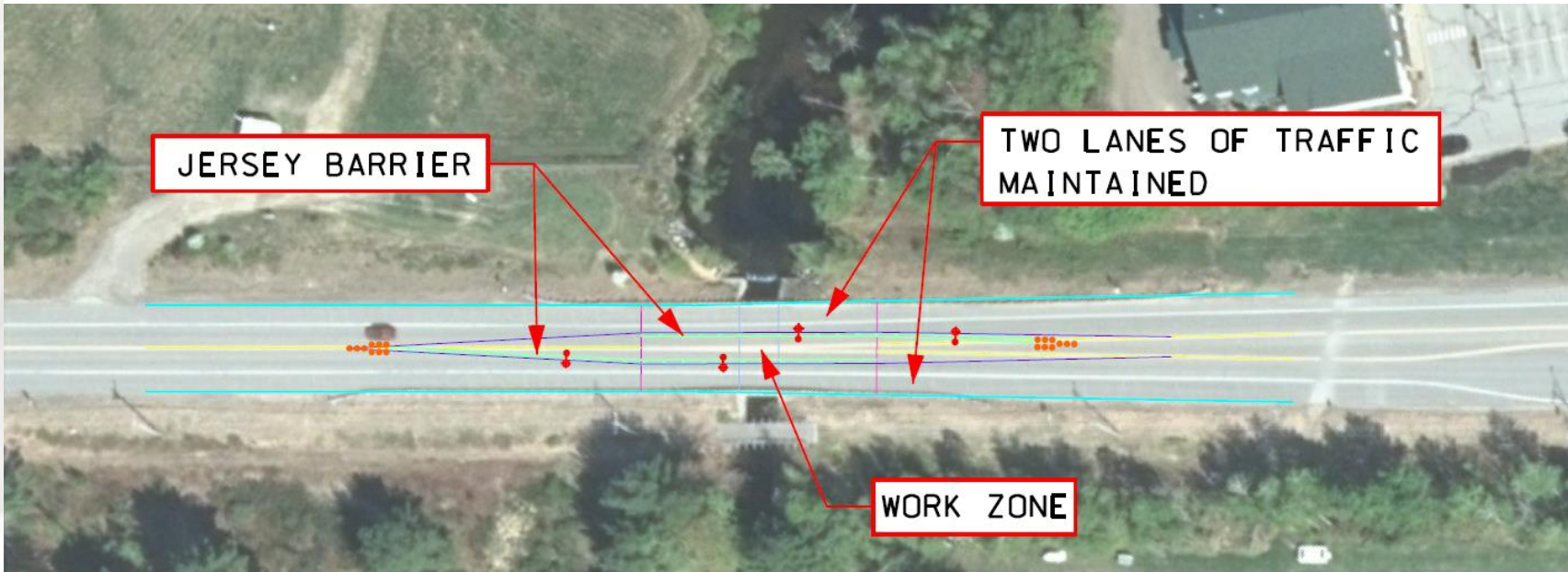
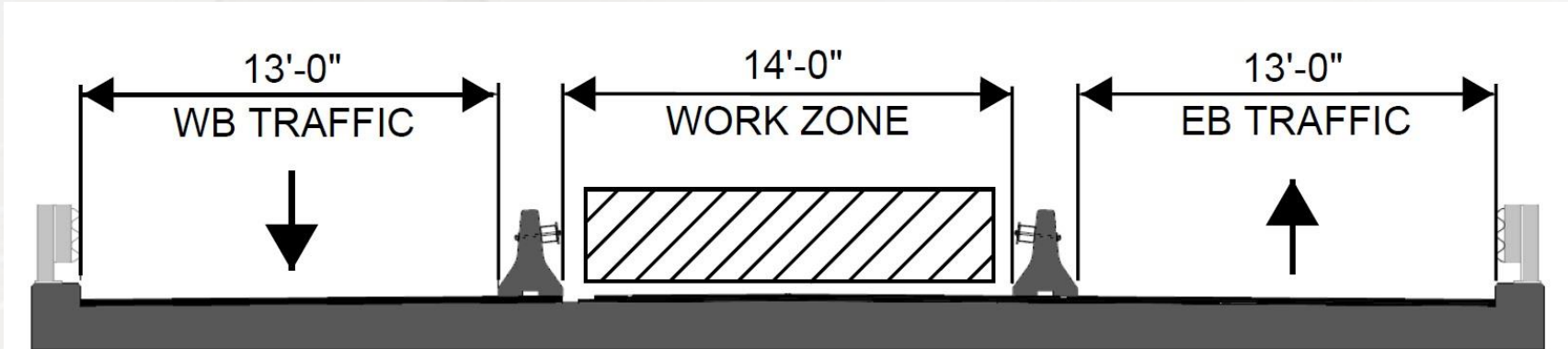
## Phased Construction

- Three construction phases
- Maintain two lanes of traffic (one lane in each direction) throughout construction
- Anticipated duration
  - Phase 1: 3 weeks
  - Phase 2: 6 weeks
  - Phase 3: 3 weeks

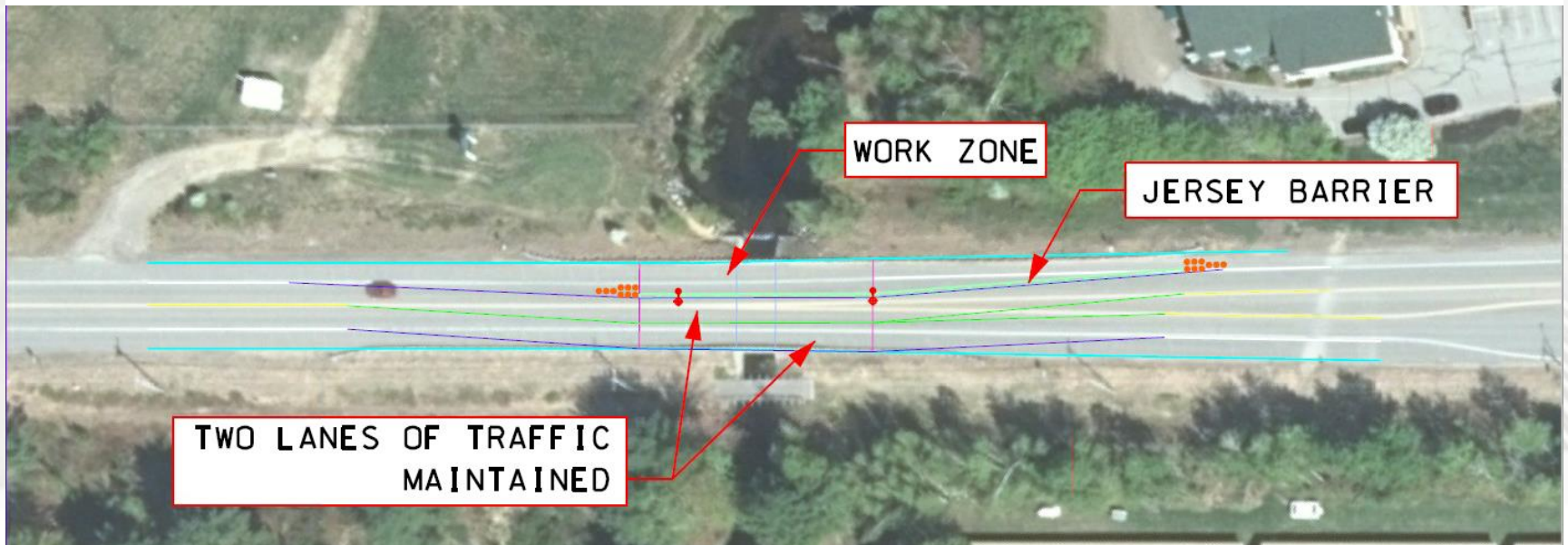
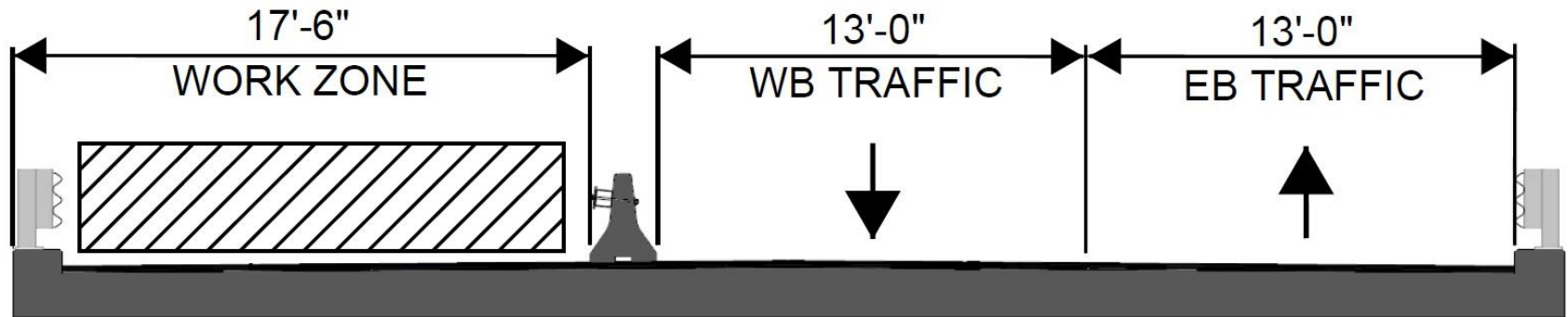
# Traffic Control – Phase 1



# Traffic Control – Phase 2



# Traffic Control – Phase 3



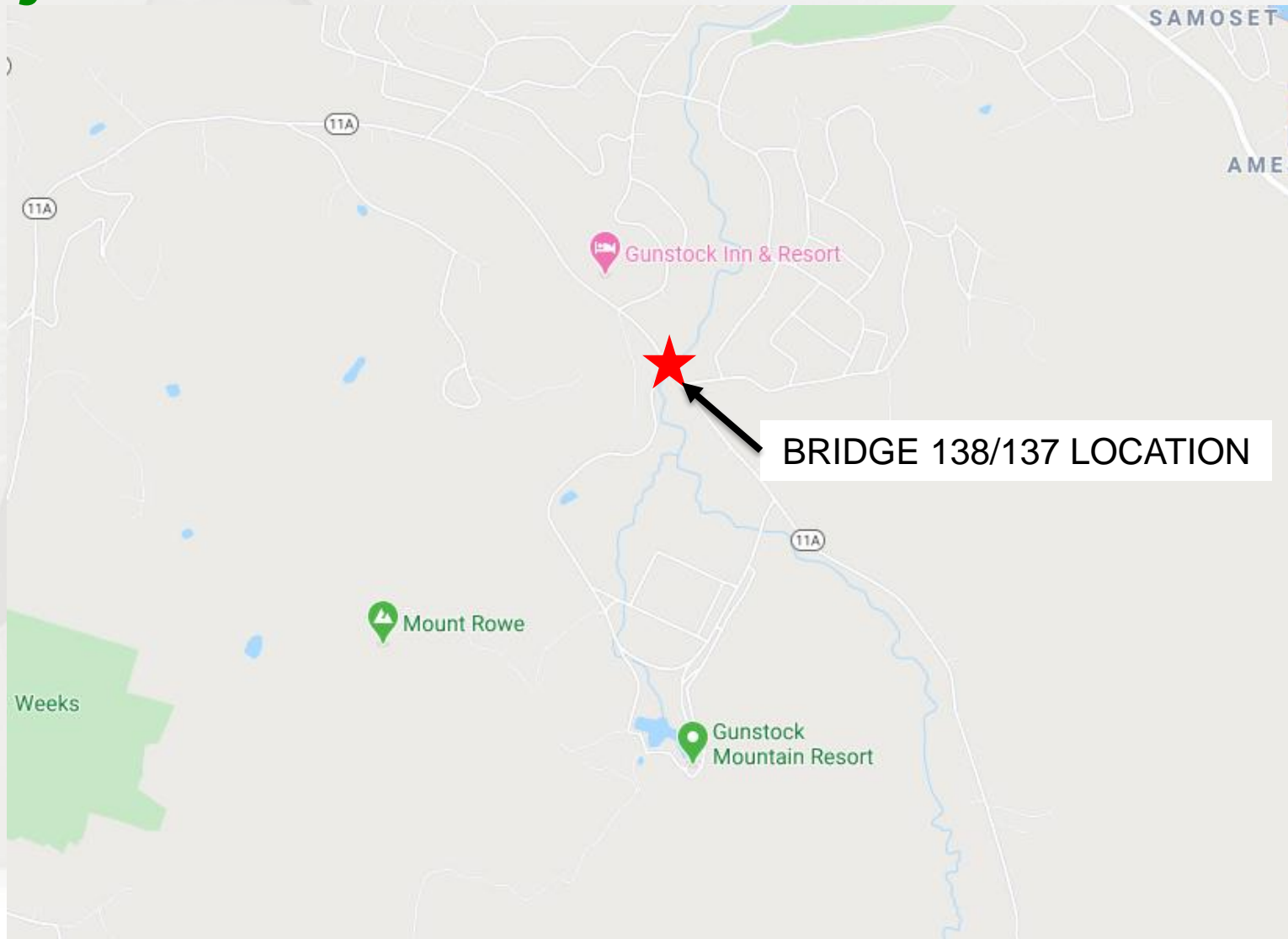
# Natural and Cultural Resources

- Gunstock River
  - Wetland Permit required for temporary impacts
- Prime Wetlands (500' + to the E and W)
  - No impacts anticipated
- Post 1945 concrete bridge is exempt from historic resource review
- No other known historic resources
- Potential rare species
  - Northern Long-eared Bat and Small Whorled Pogonia



Gilford – Bridge 138/137 – NH Route 11A over Poor Farm Brook

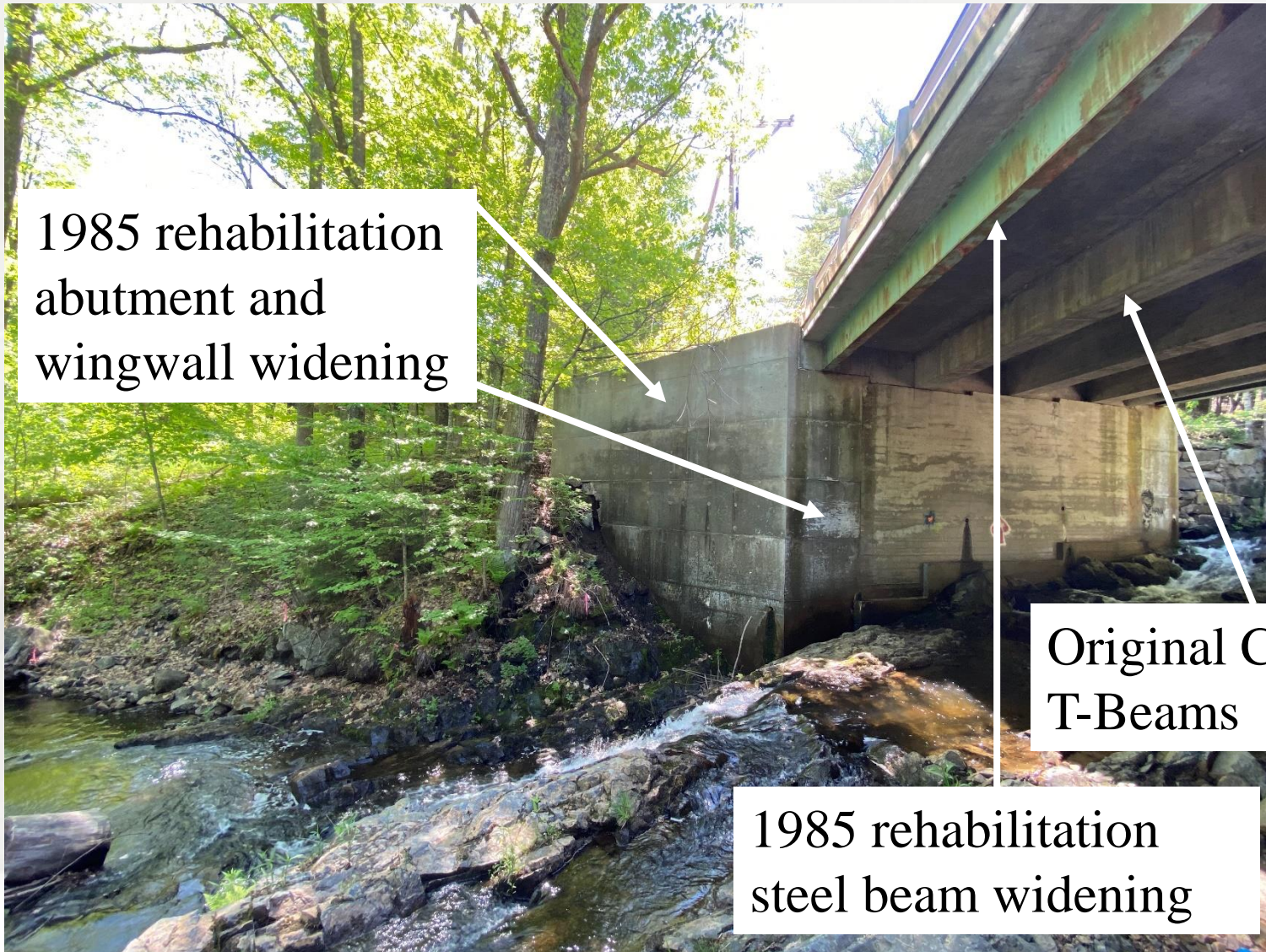
# Project Location



# Existing Bridge Details

- Concrete T-beam and steel beams
- Single span of 30'-0"
- 32'-0" curb-to-curb width
- 25-degree skew
- Constructed in 1936
- Rehabilitation in 1985 included bridge widening with steel beams
- 5,700 vehicles per day, 4% trucks

# Existing Bridge Details



1985 rehabilitation  
abutment and  
wingwall widening

Original Concrete  
T-Beams

1985 rehabilitation  
steel beam widening

# Existing Bridge Deterioration



Scupper to be removed

Excessive pavement over bridge



Damaged approach rail

# Existing Bridge Deterioration



NE wingwall undermining  
from bank erosion

Deteriorated scupper to be  
removed

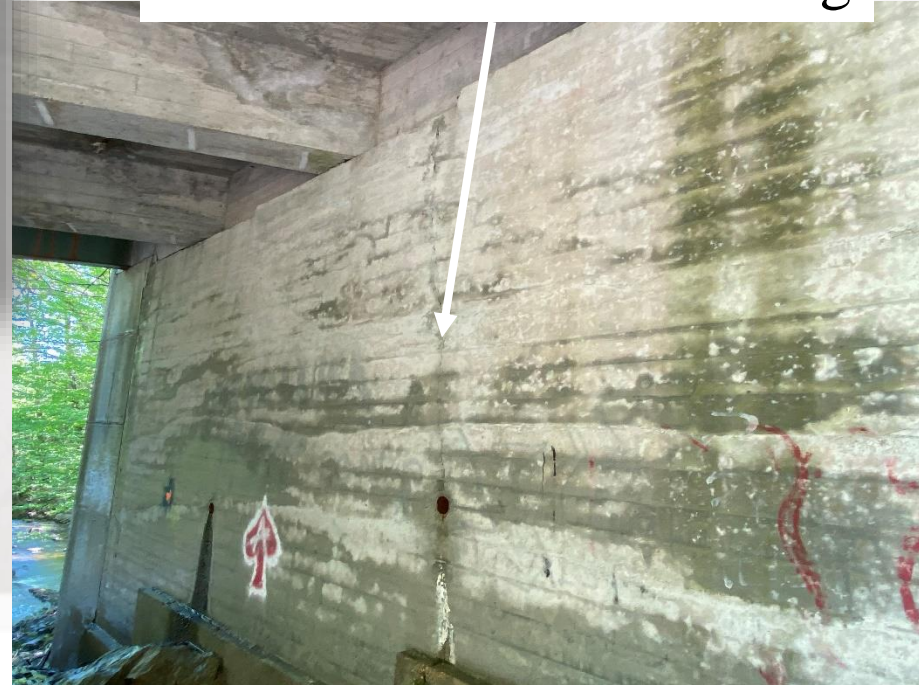


# Existing Bridge Deterioration



Typical concrete  
deck spall

Abutment surface cracking



# Bridge Preservation Items

- Replace bridge deck membrane and asphalt overlay
- Profile adjustment to remove excessive amount of pavement on bridge
- Concrete spall and crack repairs in superstructure and substructure
- Replace bridge rail
- Replace approach guardrail and terminal units
- Remove bridge drainage scupper
- Install riprap to repair bank erosion on northeast corner

# Traffic Control

## Phased Construction

- Two construction phases
- Signalized one-lane alternating two-way traffic
- Temporary signals at NH Route 11A and Area Road
- Anticipated duration
  - Phase 1: 5-6 weeks
  - Phase 2: 5-6 weeks

# Natural and Cultural Resources

- Poor Farm Brook
  - Wetland Permit required
- Bridge is not eligible for National Register of Historic Places
- Nearby homes >50 years old
  - Reviewing in accordance with Section 106
- Potential rare species
  - Northern long-eared bat

# Historic Resource Consultation

- Anyone with information or concerns about potential historic resources can contact the NHDOT Bureau of Bridge Design or Bureau of Environment.
- To be more formally involved, you can request to participate in project review as a consulting party under Section 106 of the National Historic Preservation Act. Please contact Jamie Sikora at FHWA to request to become a consulting party:  
[Jamie.Sikora@fhwa.dot.gov](mailto:Jamie.Sikora@fhwa.dot.gov)

<https://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/documents/Bureau16consultingpartyhandout-updatedAug2011.pdf>

# Project Schedule

- Public Informational Meeting – September 3<sup>rd</sup>, 2020
- Present proposed work to Cultural and Natural Resource Agencies to get their input and comments – Fall 2020
- Complete the NEPA process (National Environmental Policy Act) – Fall 2020
- Final Design – Fall 2020
- Advertising – Winter 2021
- Construction – 2021 and/or 2022

# Input is Needed

- Emergency response routes
- Mutual aid
- School bus routes
- Seasonal concerns with construction
- Bike and pedestrian concerns
- Other concerns

# Contact Information:

- Project Manager – Joe Adams, P.E.
- Email – [Joseph.AdamsJr@dot.nh.gov](mailto:Joseph.AdamsJr@dot.nh.gov)
- Telephone – (603) 271-2731

# Questions/Comments?

